



# JPC Series lead-Carbon battery

## JPC12-100

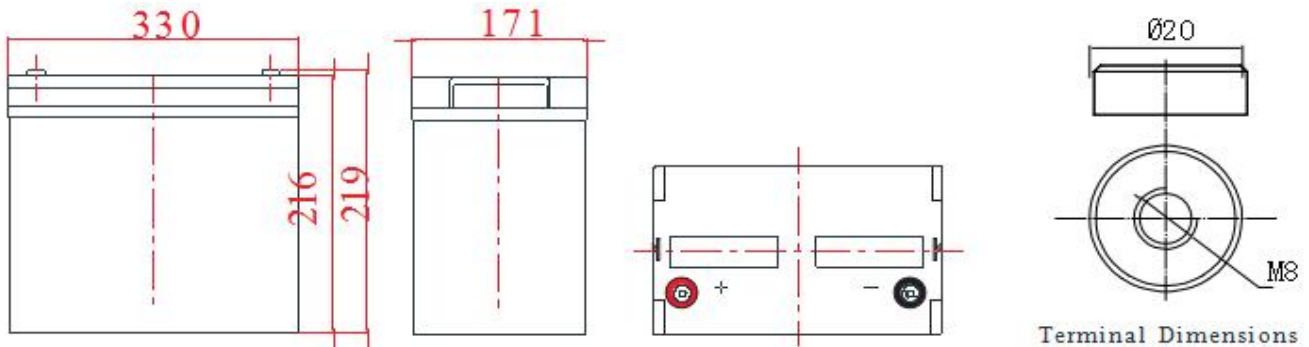
### General Features

- ▶ Lead-carbon composite negative plate, both capacitance and battery characteristics
- ▶ Long cycle life, excellent deep cycle discharge ability
- ▶ Excellent charge acceptance ability
- ▶ Optimized capability of instant high-current discharging
- ▶ Strong high and low temperature performance
- ▶ Precision sealing technology



**Dimension: 330(L) × 171(W) × 216(H) × 219(TH)**

**Unit: mm**



Specification	
Nominal Voltage	12V
Nominal Capacity	100Ah
Design life	10 years
Terminal	M8
Approx. Weight	Approx. 30.8kg (67.9lbs)
Container Material	ABS
short-circuit current	2307A
Internal resistance(Full charged at 25°C: )	5.2 mΩ
Self discharge	3% of capacity declined per month at 25°C
Operating Temperature	
Discharge:	-20 ~50°C(-4~ 122°F)
Charge :	-20 ~50°C(-4~ 122°F)
Storage:	-20 ~50°C(-4~ 122°F)
Charge Method(25 °C)	
Charge current:	Max. 25A; Recom. 10A
Float charge: 13.5-13.8V	recom. 13.8V(-18mV/ °C)
Equalize charge: 13.8-14.1V	recom. 14.1V(-24mV/ °C)
Cycle charge: 14.4-15.0V	recom. 14.7V(-30mV/ °C)

### Standards

Executive standard YD/T 799-2010

### Applications

- ▶ Solar/ wind energy and other new energy storage
- ▶ Hybrid vehicles, electric bicycles and other new energy vehicles
- ▶ Other backup or cycle purposes

### Rated Capacity

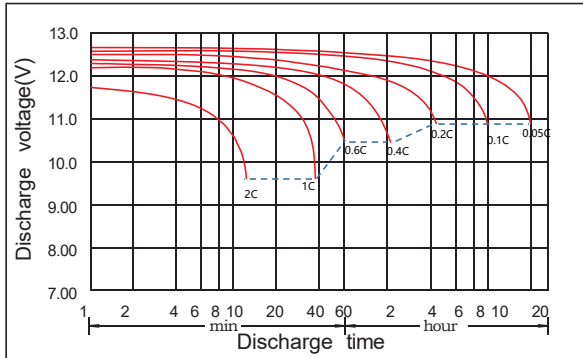
10Hour Rate (10.0A to 10.8V)	100Ah
3Hour Rate (27.5A to 10.2V)	82.5Ah
1Hour Rate (67.7A to 9.6V)	67.7Ah

### Attain Certificate

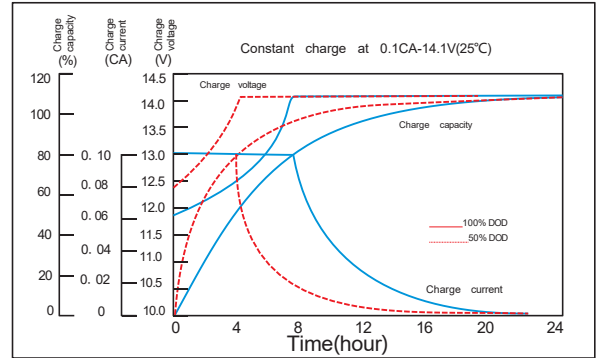


Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

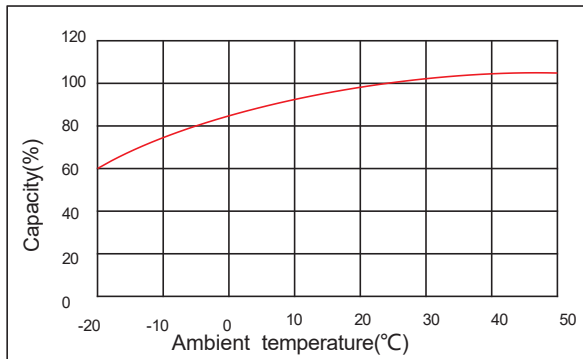
### Discharge characteristic



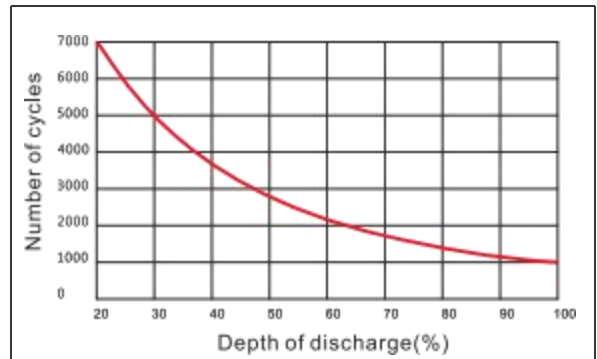
### Charging characteristic



### The effect of temperature on capacity



### The effect of discharge depth on cycle life



### Constant Current Discharge Characteristics Unit:A (25°C,77°F)

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	291	236	180	117	83	67.7	42.7	38.8	28.2	20.5	18.9	15.1	12.4	10.5	5.49
1.65V	282	229	176	115	82.6	67.3	42.3	38.6	27.9	20.3	18.7	15.0	12.3	10.4	5.46
1.70V	271	221	172	113	81.9	66.8	41.9	38.3	27.5	20.1	18.5	14.8	12.2	10.3	5.43
1.75V	249	208	166	112	80.7	65.8	41.5	37.7	27.2	19.9	18.3	14.7	12.1	10.2	5.41
1.80V	223	189	155	107	78.6	64.1	40.7	37.0	27.0	19.5	17.8	14.4	12.0	10.0	5.38
1.85V	199	168	138	97.5	72.9	59.4	39.7	35.2	25.4	19.0	16.9	14.1	11.5	9.75	5.29

### Constant Power Discharge Characteristics Unit: W/cell (25°C ,77°F )

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	488	399	318	211	154	128	84.8	73.4	53.6	40.2	35.9	29.5	24.1	20.1	10.9
1.65V	469	387	313	210	152	127	84.0	73.2	52.9	39.8	35.7	29.2	23.9	19.9	10.9
1.70V	466	374	309	209	151	126	83.1	72.9	52.6	39.4	35.4	28.9	23.8	19.7	10.8
1.75V	435	353	307	208	150	125	82.3	72.5	52.3	39.0	35.2	28.6	23.6	19.5	10.8
1.80V	400	326	290	204	149	124	81.4	72.3	52.1	38.6	34.8	28.3	23.4	19.3	10.7
1.85V	357	294	260	186	138	115	80.2	69.0	49.5	38.0	33.2	27.9	22.6	19.0	10.6